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To: Appeal Deciding Officer

This is my recommendation on disposition of the appeal filed by Michael Garrity, on behalf of the Alliance for the Wild Rockies and the Native Ecosystems Council, protesting the Rat Creek Salvage Decision Notice signed by the Forest Supervisor on the Beaverhead-Deerlodge National Forest (BDNF).

The Forest Supervisor's decision adopts Alternative 2 (the Proposed Action) as described in the Rat Creek Salvage environmental assessment (EA). The selected alternative includes the salvage harvest of approximately 1,652 acres of dead and dying trees within the Rat Creek Wildfire perimeter, reforestation of the harvest units through natural regeneration, supplemental planting to maintain the pre-fire mix of tree species, and sanitation of dwarf mistletoe infected trees to reduce disease infection in the new forest stands. Harvest activities include approximately 7 miles of temporary road construction and approximately 3 miles of existing road reconditioning for log hauling. The temporary roads will be obliterated upon completion of harvest operations. The selected alternative will supply an estimated 27,000 CCF of sawtimber and non-sawtimber products to area mills. The Regional Forester has granted approval of harvest units larger than 40 acres.

My review was conducted pursuant to, and in accordance with, 36 CFR 215.19 to ensure the analysis and the decision are in compliance with applicable laws, regulations, policy, and orders. The appeal record, including the appellants' objections and recommended changes, has been thoroughly reviewed. Although I may not have listed each specific issue, I have considered all the issues raised in the appeal and believe they are adequately addressed below.

The appellants allege violations of the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), the Endangered Species Act (ESA), the Administrative Procedures Act (APA), the Clean Water Act (CWA), the revised Forest Plan for the Beaverhead-Deerlodge National Forest, and the Forest Service Manual. An informal meeting was held but no resolution of the issues was reached.

The appellants request that the Forest Service provide: 1) a map of the unroaded areas; 2) an inventory of old growth in the project cumulative effects analysis area and forest-wide; 3) an alternative that would leave a contiguous block of 387 hectares (956 acres) of burned forest in the Rat Creek fire area; 4) the scientifically determined amount of error inherent in all models and methodologies used for EA analyses; 5) the monitoring requirements and the monitoring



results of all past large timber sale and road construction projects in the cumulative effects analysis area; and 6) correct all other legal and scientific deficiencies. Otherwise, Appellants request that the EA, DN, and FONSI be withdrawn or remanded and an Environmental Impact Statement be prepared.

ISSUE REVIEW

Issue 1. The Forest Service must prepare a full Environmental Impact Statement for the Rat Creek Project and wait until the Forest Service rules on the revised Forest Plan appeal.

Response: The optional administrative appeal and review procedures allowed by Title 36, Code of Federal Regulations (CFR), part 219–Planning, Subpart A–National Forest System Land Management Planning (36 CFR, part 219, subpart A or 2000 planning rule) are applicable to the Revised Beaverhead-Deerlodge Forest Plan approved January 14, 2009. Section 10(b) of these procedures states, “Requests to stay the approval of land and resource management plans prepared pursuant to 36 CFR part 219 shall not be granted. However, requests to stay implementation of a project or activity included in such a plan will be considered as provided for in paragraph (c)”.

Paragraph (c) states, “Where a project or activity would be implemented before an appeal decision could be issued, the reviewing officer shall consider written requests to stay implementation of that decision pending completion of the review.” In the case of the Forest Plan appeals, the reviewing officer is the Chief of the Forest Service, who has not received a written request to stay implementation of the Rat Creek decision. Therefore, paragraph (h) of the optional procedures applies. It states, “A decision may be implemented during a review unless the reviewing officer has granted a stay”.

The significance of environmental effects of a proposed action determines whether or not an environmental impact statement (EIS) must be prepared. The Forest appropriately used the EA to “...provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact” (40 CFR 1508.9(a)(1)). A finding of no significant impact (FONSI) (40 CFR 1508.13) was prepared for the Rat Creek Salvage project, in which the Acting Forest Supervisor determined the actions outlined in the Rat Creek Salvage EA will not have a significant effect on the quality of the human environment (DN/FONSI, p. 13). The Acting Forest Supervisor considered both the context and intensity of impacts of the project according to the Council on Environmental Quality (CEQ) regulations (40 CFR 1508.27). These findings are well supported by the evidence and analysis found in the Rat Creek Salvage EA, including the predicted environmental impacts of the proposed action. References to the resource analyses in EA are found throughout the FONSI.

Issue 2. The Forest Service did not take a hard look at how climate change affects and is affected by this Project in violation of NEPA, NFMA, the Forest Plan, and APA.

Response: The appellants allege violations of NEPA, NFMA, the Forest Plan and the APA due to published scientific reports that indicate logging will exacerbate climate change due to the loss

of carbon storage, and climate change will lead to increased wildfire severity that may render obsolete the proposed effects of the project.

This issue of climate change was not raised by the public during scoping, or during the comment period on the EA. The Rat Creek Salvage project responds to the immediate need to recover and utilize timber from trees that are dead or dying as a result of the Rat Creek Wildfire or secondary agents such as insect and disease, and reforest the harvest units with trees appropriate for the site. Natural regeneration of lodgepole pine is expected and planting Douglas-fir is proposed to maintain the pre-fire species mix of trees (EA, p. 4). The project seeks to maintain a diverse tree species mix through reforestation, which would make for a more resilient forest in the face of insect and disease, and potential drought conditions brought on by climate change.

The IDT team appropriately considered the discussions of climate change in the BDNF Forest Plan, and the life of the project (approximately 3 years), which is short compared to the expected rate of climate change and its associated effects. A discussion of climate change is provided in Appendix A of the Forest Plan Record of Decision (PF, A1-05, p. A-1). It states, “The goals and objectives of the forest plan are consistent with maintaining the resilience and diversity of the forests, grasslands, and watersheds of the BDNF in the face of the potential effects of climate change... Moreover, the next 10 to 15 years is relatively short period in terms of global and regional climate trends, and may not differ from the range of variability experienced in recent decades.” The Forest Plan FEIS provides an analysis of climate change (PF A1-04, pp. 460, 469, 482, 1041 to 1047; Appendix A, p. A-2; and Appendix B, p. 99).

The effects of the burning of fuels associated with the salvage operations under the proposed action are described under the Air Quality section of the EA (pp. 112 to 115).

The appellants request consideration of six published scientific papers listed in their appeal; however, these reports were not submitted during scoping or with their comments on the EA. Submission at this late stage prevented discussion or evaluation within the context of the EA or DN.

NEPA requires a hard look at the impacts of an action and a discussion of the significant aspects of the probable environmental consequences. As far as how climate change is affected by the project, the appellant does not supply, and the Forest does not have, any evidence to show the project would directly impact climate change. The analysis and project is in compliance with NEPA, NFMA, APA, and the Forest Plan.

Issue 3. SOIL PRODUCTIVITY

Contention 3-1. The EA failed to analyze an alternative that would not further damage sensitive sites while taking necessary steps to actively restore the soil, hydrological functioning, and other resources that—in combination with past development activities—the fire affected.

Response: The appellants did not comment during the scoping period and therefore did not raise the issue of analyzing an alternative that would not damage sensitive sites. No other comments

were received during scoping that raised this as an issue. This issue was not raised by the appellants in their response letter following a field trip to the project (PF, B3-06).

Several alternatives were considered but eliminated from detailed study in the EA (pp. 13 to 15) that addressed issues associated with a reduction in soil disturbance, including an alternative that did not construct new roads, and an alternative that did not salvage in unroaded lands contiguous to inventoried roadless areas. The analysis and project are in compliance with NEPA and NFMA.

Contention 3-2. The EA's soil section fails to disclose in sufficient detail how soil productivity has been affected by the 2000 fires, especially in moderately and severely burned areas.

Response: The expected impacts to soils are disclosed in the EA (pp. 80 to 95) and DN (p. 15). Fire severity effects on soil were evaluated in the EA (pp. 86 to 87), and were found to be "low". The selected alternative will not cause irreversible resource damage and does not propose activities that are expected to impair site productivity (DN, p. 21).

Contention 3-3. The EA's failure to face the issue of maintaining soil productivity is clearly demonstrated by its unwillingness to consider burned areas—where soil productivity has already been decreased for the foreseeable future—to meet the definition of "detrimentally disturbed."

Response: The indicators for soil disturbance are identified in the Northern Region Soil Quality Standards (USDA Forest Service 1999), which set limits to the degree and aerial extent of soil disturbance to maintain soil productivity, thus meeting the intent of NFMA (EA, p. 80). The Burned-Area Emergency Rehabilitation Handbook (FSH 2509.12, USDA Forest Service 1995) was used to describe the effects of wildfire. Fire severity effects on soil were evaluated in the EA (pp. 86 to 87), and were found to be "low".

Contention 3-4. The EA does not consider detrimental soil disturbance from livestock grazing or off-road vehicle use. The EA ignores detrimental impacts from livestock grazing, justifying this because grazing would be suspended for a few years, as if that effectively mitigates the detrimental impacts.

Response: The soils analysis in the EA recorded preexisting soil disturbance for each proposed harvest unit. The indicators that were recorded include erosion, compaction, rutting, and displacement from previous activities (EA, p. 80). According to the EA, grazing has not taken place since the Rat Creek fire, and no detrimental soil disturbance related to grazing activity was noted within the proposed harvest units. Cumulative effects from grazing in the Tie-Johnson grazing allotment were found to be unlikely as no existing detrimental effects were found within proposed harvest units. The EA states that units within the selected alternative are not suitable/capable grazing areas, and the livestock use would be incidental at most (EA, p. 94). The EA also states that no unauthorized ATV trails were found in the proposed harvest units and that potential impacts from these activities are confined to limited areas of compaction and displacement (EA, p. 85-86).

Contention 3-5. The proposal to log in areas of low soil productivity due to impacts of wildland fires and past logging activities flies in the face of NFMA's requirements to assure regeneration, sustained yield, and maintain soil productivity.

Response: The EA's evaluation of the effects of the Rat Creek Wildfire on the soil found the overall fire severity classification as "low" (EA, p. 87). The EA found no existing detrimental disturbance from past harvest activities in any of the proposed harvest units (EA, p. 85). The EA (p. 94) states the proposed action would meet the Region 1 Soil Quality Standards to protect soil productivity. The R1 Soil Quality Standards address NFMA, ensuring that soils will not be irreversibly damaged (EA, p. 82). The responsible official determined in the DN that the selected alternative was consistent with NFMA, stating "irreversible resource damage will not occur", "the selected alternative does not propose activities expected to impair site productivity", and "adequate stocking is assured by a certified silviculturist" (DN, p. 21).

Contentions 3-6, 3-7, and 3-11. The FS's determination that it may permanently damage the soil on 15% of an activity area and still meet NFMA and planning regulations is arbitrary. The EA does not cite any scientific basis for adopting the 15% numerical limit.

Response: The responsible official determined the selected alternative is consistent with NFMA by assuring the selected alternative will not cause irreversible resource damage and does not propose activities expected to impair site productivity (DN, p. 21). The R1 Soil Quality Standards set the limits to the degree and aerial extent of soil disturbance to maintain soil productivity, thus meeting the intent of NFMA (EA, p. 80). Projected detrimental soil disturbance for harvest units and temporary roads is displayed in the EA (Table 28, pp. 90 to 91). "After temporary roads are obliterated, all proposed harvest units would meet the Region 1 Soil Quality Standards of no more than 15 percent of an activity area in detrimental condition" (EA, p. 91).

The Draft Northern Region Soil Disturbance Monitoring Protocol (USDA Forest Service 2008a), March 2008 version was followed to assess existing soil disturbance in the proposed harvest units, and also in an older unit that was salvage logged after burning in 1989. The protocol directs users to walk through proposed units, and if there is no evidence of past management, to document the area as undisturbed (ibid, p.16), meaning there is no need to implement the protocol (PF D1-24, Soils Report, p. 1). "In addition to evaluating preexisting soil disturbance and the effects of the Rat Creek fire on the soil, existing soil maps (USDA Forest Service, 2007a) were validated by digging occasional holes while traversing the units. Site-specific soil characteristics were noted to determine the hazard for soil erosion, rutting, and compaction associated with proposed action implementation" (PF D1-24, Soils Report, p. 2). "No existing detrimental disturbance was noted in any proposed harvest units; therefore, this was documented and the Soil Disturbance Monitoring Protocol was not implemented (USDA Forest Service 2008a, p. 16)" (PF D1-24, Soils Report, p. 7). "[A] minimum of 85% of each activity area [is required to] be in satisfactory condition (free of detrimental disturbance), to maintain soil productivity (USDA Forest Service 1999). Activity areas are defined in the Regional Soil Standards as the proposed harvest units, including landings and temporary road construction" (PF D1-24, Soils Report, p. 10).

In order to meet NFMA direction and manage National Forest System lands without permanent impairment, the policy of the Northern Region is to "...not create detrimental soil conditions on more than 15 percent of an activity area" (FSM, 2554.03). Detrimental soil disturbance is not equal to permanent damage. The soil scientist did perform field monitoring of soil conditions along with validating the existing soil maps by digging occasional holes while traversing the units (EA, p. 80, PF Doc. F1-02). The data indicate that none of the units would cumulatively be above the 15 percent detrimental effects (EA pp. 90-91, Table 28). Monitoring conducted on previous vegetation management projects of timber sales on the forest has proven soil and water conservation practices to be effective in controlling the amount of detrimental disturbance in activity areas. For example, the 2004 monitoring report showed that for one project on the forest, detrimental disturbance was estimated at less than 10 percent overall (EA, p. 89; PF, Doc. D3-211). The project provides for coarse woody debris in accordance with Graham, et al. (1994) (EA, p. 18; EA, p. 88).

Cumulative effects from the proposed activities, including the recent wildfire, would not likely lead to long-term impairment of soil productivity, as discussed in the EA (p. 94). Temporary roads will be decommissioned following harvest operations (DN/FONSI, p. 4). The project is in compliance with NFMA.

Contention 3-8. Despite the Regional Soil Quality Standards requirement that temporary roads be included in calculations of percent detrimental soil disturbance for activity areas, the EA does not disclose how these obvious to be heavily disturbed acres are included in the calculated predictions for those units.

Response: The assumptions that were used to predict the amount of detrimental soil disturbance associated with the proposed action are described in the EA. Temporary road construction is considered to be detrimental disturbance in these assumptions and is calculated by "multiplying a width of 14 feet by the length of the proposed road" (EA, p. 81). The Disturbed Water Erosion Prediction Project (WEPP) model was run to generate predicted erosion as a result of the proposed salvage harvest. The EA (p. 81) states that details of the modeling assumptions can be found in the Soil Resource Report (PF D1-24).

Contention 3-9. The EA also does not disclose the locations and acreages of log proposed landings, which is important because of the extreme amount of soil and other disturbance that occurs on these sites—they will be essentially industrialized for the long-term, despite "mitigation." Also, these impacted areas must be part of the calculation of detrimentally disturbed acreages, as per the Soil Quality Standards, which the EA neglects to do.

Response: Log landings are incorporated into the calculation of detrimental soil disturbance, and the disturbance is expected to be "about 0.08 acres" (EA, p. 81). The EA (Table 28, p. 90 to 91) displays the projected detrimental soil disturbance for harvest units, temporary roads, and landings. Mitigation for landings includes re-vegetation with native seed and scarifying compacted soils prior to seeding (EA, p. 18).

Contention 3-10. Since the EA does not provide the public or decision maker with any kind of information on the accuracy of its estimates of detrimental soil disturbance, the EA's information is not scientifically valid or reliable, and fails to meet NEPA requirements.

Response: Soil and water conservation practices have been shown to be effective in reducing soil disturbance on the Beaverhead-Deerlodge NF (EA, pp. 89 to 90). The proposed action includes project design features and mitigation measures to protect soils (EA, p. 18). Monitoring conducted on previous vegetation management projects has proven soil and water conservation practices to be effective in controlling the amount of detrimental soil disturbance in activity areas (EA, p. 89).

Contention 3-12. The EA fails to cite the results of monitoring that prove the frozen soil or deep snow mitigation measures are effective in protecting soil properties and maintaining soil productivity.

Response: The proposed action does not include "frozen soil" or "deep snow" in its design features or mitigation measures. However, monitoring cited in the EA for burning slash piles stated that burning "when the soil is frozen has been shown to protect the soil" (EA, p. 90).

Contention 3-13. The EA largely relies on the FS's track record of relying upon Best Management Practices (BMPs) to base its claims that soil productivity will be maintained following logging practices. However, BMP monitoring does not attempt to measure post-project soil productivity, since the audits are not scientifically designed to do so. Also, BMP monitoring does not measure post-project detrimental disturbance percentages in project activity areas.

Response: The EA does include a plan for monitoring, including the monitoring of harvest units and roads "after harvest to assure compliance with Region 1 Soil Quality Standards" (EA, p. 19). The DN cites compliance with NFMA by incorporating Forest Service Soil and Watershed Conservation Practices (BMPs) into project design features (DN, p. 22). Monitoring conducted on previous vegetation management projects has proven BMPs to be effective in controlling the amount of detrimental soil disturbance in activity areas (EA, p. 89).

Issue 4. The roadless analysis is inadequate.

Response: The EA (pp. 116 to 126) includes an analysis of Inventoried Roadless Areas and unroaded areas. There is no proposed harvesting in Inventoried Roadless Areas (IRAs). There is harvesting in unroaded areas in which the resource values are considered and the effects are disclosed. The analysis reviewed the capability and availability of the IRAs for potential wilderness. It also discusses the overall wilderness capability of the unroaded areas. The analysis of IRAs and unroaded areas focuses on the potential effects of project activities on wilderness characteristics as defined in the Forest Service Handbook 1090.12 (72.1). The No Action alternative, which was analyzed in detail, maintains the wilderness values of all inventoried roadless and unroaded lands in the project area.

The EA (p. 11) includes a map of harvest units, Forest System roads and proposed temporary roads, and inventoried roadless areas. Given the definition of unroaded lands in the EA (p. 116)

and the map provided, the unroaded lands can easily be identified. An alternative that did not include any salvage in unroaded lands contiguous to inventoried roadless was considered but eliminated from detailed study (EA, p. 15). The analysis is in compliance with NEPA.

Issue 5. BLACK-BACKED WOODPECKER AND SNAG HABITAT: NFMA AND NEPA VIOLATIONS

Contention 5-1. The EA's analysis for black-backed woodpecker does not ensure viability of the species, as the Rat Creek Salvage project will destroy an inordinate amount of habitat.

Response: I find that the analysis for black-backed woodpeckers is sufficient and is well supported in the project file (EA, pp. 44 to 48; and DN, pp. 8 to 10). Based on my review of the record, I find the Forest effectively used ongoing local and Forest evaluations, field surveys, existing conditions, and current and applicable research to evaluate potential effects of the Rat Creek Salvage on the black-backed woodpecker and its habitat, and they applied appropriate conservation measures which will limit potential effects (EA, pp. 17 and 48; and DN, pp. 10 to 11). The analysis evaluates habitat quality and quantity within the immediate effects area, and places this in an appropriate context with Forest-wide habitat conditions and at a Regional scale (EA, pp. 44 to 48). The analysis identifies and discloses potential effects and likelihood for consequences to individuals and the species at several scales.

The Rat Creek Fire created an estimated 25,600 acres of habitat available to black-backed woodpeckers. Over 23,900 acres (93 percent) of this habitat is expected to persist (un-salvaged) and be widely distributed following implementation of the selected alternative (EA, p. 48). The Acting Forest Supervisor recognized these effects and weighed them appropriately with other factors in reaching his decision (DN, p. 8). I have reviewed the biological evaluation and the supplement to the biological evaluation. I find them adequate and consistent with Forest Service policy. The biological evaluation found that implementation of the project "may impact individual black-backed woodpeckers, but would not threaten the viability of the black-backed woodpecker nor cause a trend toward federal listing" (EA p. 48). Consistent with Forest Service Manual direction at 2621.2, conservation strategies do not need to be prepared at this time. The project is compliant with NFMA and NEPA.

Contention 5-2. The Rat Creek Salvage EA ignores a lot of recent research and discussion on the black-backed woodpecker, which would be necessary to adequately analyze cumulative effects. From a NEPA perspective, the FS has not taken the requisite hard look at the impacts of salvage logging on the viability of black-backed woodpeckers, especially in light of the devastating impacts of past misguided fires suppression and "salvage" logging policies. The BDNF even refused to survey the areas to be logged, to determine how many nests the logging will disrupt.

Response: The appellants do not cite the recent research they allege has been ignored. Current science was considered and used. The most recent Black-backed Woodpecker Northern Region Overview Key Findings and Project Considerations, 2007 was referenced (EA p. 45) and cited in addition to the supporting literature. This document represents a regional assimilation of up-to-

date literature. It was used in the analysis, and was prepared by the black-backed woodpecker working group which consists of professional wildlife biologists familiar with black-backed biology and management implications at the local and regional scale.

Issue 6. SENSITIVE SPECIES, OLD-GROWTH SPECIES, AND MANAGEMENT INDICATOR SPECIES

Response: After reviewing the appeal contentions and the Rat Creek Salvage EA, DN, FONSI and project record, I believe the Acting Forest Supervisor has properly evaluated and provided appropriate assurances that the project and Forest are consistent with the NFMA for old growth, mature conifer forest, snag habitat, and old growth dependant species. First, the Forest recognized these as potential issues early in the process and paid attention to them in the design of the project (consciously limiting the nature and scope of potential effects), the analysis, and the final decision (DN, pp. 9 to 12). Secondly, the Forest applied a reasoned and affective approach to assess potential affects to these resource values commensurate with the scope of the proposal and confirmed the resulting condition's compliance with law and regulation in multiple contexts (EA, pp. 35 to 80). Snag retention standards, old growth retention, and avoidance of riparian conservation areas are consistent with Revised Forest Plan goals, objectives, and standards, which were designed to maintain suitable habitat conditions for a variety of wildlife species. The effects analysis for wildlife and aquatic species is sufficient and is supported in the project record documents, such as the wildlife and aquatic species analyses portion of the EA (pp. 35 to 80), the wildlife BA/BE (PF, D1-26), the aquatic BE (PF, D1-03), and in the DN (pp. 14 to 15).

Contention 6-1. The revised LRMP fails to adequately provide for the protection of important habitat types and their associated management indicator species (MIS). Specifically, the revised LRMP does not ensure the protection and management of adequate snag habitat. The proposed project exacerbates the paucity of snag habitat by logging an area that has already been burned and repeatedly logged in the past.

Response: The Forest Plan Wildlife Standard 3 (BDNF FP, p. 48) states that mechanical vegetation treatments will: 1) retain all snags greater than 20" dbh (except for hazard trees); 2) not reduce the number of snags greater than 15.0" dbh in treatment units below the levels shown in Table 12, calculated as an average for the total treatment unit acreage in a project area. This calculation allows variability among treatment units which produces a more natural clumpy distribution; 3) if there are insufficient snags in treatment units, live trees in the same size class must be retained and counted towards the snag requirement. These would be in addition to any requirements of Standard 4; 4) these per acre requirements do not apply to the treatment units if analysis shows the levels of snags will be met for the project area as a whole; and 5) if, in the project area as a whole, there are insufficient live trees and/or snags greater than 15.0" dbh, the standard is deemed complied with by retention of the existing live trees and/or snags greater than 15.0" dbh in the treatment units. Forest Plan Wildlife Standard 4 says do not reduce the number of live trees greater than 10.0" dbh in regeneration harvest treatment units (to provide future snags) below the levels shown in Table 13.

Within salvage units, all snags greater than 15.0" dbh will be retained to meet the Forest Plan wildlife standard for snags. Snags greater than 15.0" dbh will be felled only where they are a defined hazard to harvest operations and designated by a Forest officer (EA, p. 17). Outside of treatment units (which covers approximately 24,000 acres), snags will remain abundant and in large/continuous patches (EA, p. 48).

In addition, the EA (p. 48) states, "as the result of recent and projected disturbances, black-backed woodpecker habitat and populations are estimated to be maintained well above the habitat viability estimate of 30,000 acres in the region and ecological province by Samson (2006a)." The project is in compliance with the Plan. The Plan and the project are in compliance with NFMA.

Contentions related to old growth habitat and species

Contention 6-2. There is serious uncertainty over the validity of the Forest Plan old-growth standards. Clearly, the FS did not have scientific information that validated their Forest Plan Standards for old growth when they adopted the Forest Plan.

Contention 6-3. The EA failed to disclose the forest wide status of old growth in the BDNF.

Contention 6-4. The EA also inexplicably fails to consider the range of old-growth types found on the BDNF, as reflected in Green et al. 1992, a scientific Region One old-growth document. The Beaverhead Forest Plan recognizes only Douglas-fir and spruce as old growth in the Forest Plan standards (USDA FS 1986, p. II-29).

Contention 6-5. The EA claims old growth will not be logged in the project area. However, the EA (p. 128) states that because of the fire, old growth distribution within the Project area is below Forest Plan Standards. We note the Forest Plan has no provisions for dealing with this situation, which reveals the inadequacy of the Forest Plan for meeting NFMA's viability provisions. So the BDNF proposes to go ahead and log burned old growth, claiming it does not meet old growth criteria. Whereas we don't see in the EA cites to the record that indicate all this burned old growth fails to meet old-growth criteria, what is indisputable is that components of old growth species' habitat will be reduced, and therefore habitat for Threatened, Sensitive, and management indicator (MIS) species will be adversely impacted. The habitat and population trend for these species is already downward, and logging such as this will only continue that trend. The EA is unable to disclose and analyze habitat amount and distribution information for old-growth wildlife species, a requirement under NFMA.

Contention 6-6. The DEIS failed to consider that areas that were lightly or moderately burned in the fire areas may have had old growth habitat values enhanced, rather than destroyed as the DEIS leads one to believe. Areas of the BDNF have had their value for wildlife enhanced by fire in recent years, but the FS wants to suppress this enhanced habitat by logging it, since fire suppression itself didn't accomplish the prevention of the development of this habitat!

Contention 6-7. Nothing in the EA discusses the relative value of burned, unlogged forest for old-growth recruitment compared to the obviously depleted value of logged forest, there is only vague implication that unlogged burned forest has more habitat components used by old growth species than would “salvage” logged areas.

Contention 6-8. In the total absence of population monitoring information, the FS’s decision to log any forest area that provides habitat for old-growth wildlife species is arbitrary and capricious. The logging would remove such habitat as well as adversely affect old-growth habitat components.

Contention 6-9. The Rat Creek Salvage EA does not sufficiently deal with the issue of fragmentation, road effects, and past logging on old-growth species’ habitat.

Contention 6-11. The EA fails to disclose how the old-growth areas previously logged are meeting old growth criteria, and fails to disclose the results of monitoring that shows old-growth wildlife species still used the logged areas—the only way of proving the claim that logged old growth still functions as such.

Response: Old growth habitat is well distributed across the Forest. The Forest Plan directs that mechanical vegetation treatments and prescribed fire in old growth stands do not reduce the age and number of large trees and basal area below the minimum criteria required for Eastern Montana old growth in Green et al (1992), Table 3 (EA, p. 52).

Treatments are not proposed in any old growth stands (EA, pp. 28 and 67). The proposed action for the project was developed using “design criteria” to focus salvage efforts where impacts and concern over the project would be minimal. Units were dropped from the proposed action if they had old-growth characteristics prior to the wildfire (EA, pp. 14). Only fire-killed trees and trees that would die due to insect attack would be harvested (EA, p. 3). Stands included in the proposed action do not meet the Forest Plan definition of old growth (EA, Appendix C).

The Rat Creek Salvage EA does not make the statement alleged by the appellants, “that because of the fire, old growth distribution within the Project area is below Forest Plan Standards.” The project relies on data presented in the revised Forest Plan which indicates that old growth is present in sufficient quantities in the Big Hole landscape and across the forest. The wildlife BA/BE (Table 10, p. 81) indicates the Big Hole landscape contains 16.1 percent old growth and averages 8.4 snags greater than 10” dbh per acre. The wildlife BA/BE (fig. 23, p. 83) displays FIA data from the Forest Plan FEIS showing substantial amounts of old growth in the Big Hole landscape, and well distributed across the Forest. In compliance with Forest Plan Standards, the silviculture report (Appendix B in wildlife and Silviculture Resource Reports) includes an analysis of stand data within proposed harvest units. This data indicates that stands proposed for harvest did not meet old growth criteria from Green et al. (1992) before the fire or after the fire.

The wildlife analysis in the EA and the wildlife BA/BE considered not only old growth habitat, but also the potential direct and indirect effects of the Rat Creek Salvage project, and cumulative effects associated with past, present, and reasonably foreseeable activities (EA, Appendix B). While fragmentation of old growth was not raised as an issue during comments on the EA,

consideration of the effects of the project on old growth habitat is found in the EA for various species including black-back woodpecker (EA, p. 45), fisher (EA, pp. 49, and 52 to 53), wolverine (EA, p. 55), Townsend's Big-eared bat (EA, p. 58), spotted bat (EA, p. 60), and northern goshawk (EA, pp. 64 and 67).

As a point of clarification, NFMA has no viability provisions. NFMA requires that land management plans "provide for the diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives, and within the multiple-use objectives of a land management plan adopted pursuant to this section, provide, where appropriate, to the degree practicable, for steps to be taken to preserve the diversity of tree species similar to that existing in the region controlled by the plan" (16 USC 1604(g)(3)(B)). The project is in compliance with NFMA.

Contention 6-10. The Beaverhead NF Forest Plan contains the following standard: Populations of wildlife "indicator species" will be monitored to measure the effect of management activities on representative wildlife habitats with the objective of ensuring that viable populations of existing native and desirable non-native vertebrate species are maintained" (Forest Plan, p. II-26). The EA does not demonstrate compliance with this standard.

Response: The appellants reference the old Forest Plan and not the new revised Forest Plan under which the Rat Creek Salvage project was prepared. The EA demonstrates compliance with the relevant revised Forest Plan wildlife standards in the wildlife analysis in the EA (pp. 35 to 67) and in the wildlife BA/BE (PF D1-26).

Contentions related to Sensitive Species

Contention 6-12. The EA reveals no baseline or quantitative population data for the sensitive species or their habitats. The agency has failed to obtain or maintain any past or current hard population or inventory or monitoring data for the sensitive species at issue in the project area or for the BDNF as a whole. Distribution, status and population trends have not been determined.

Contention 6-13. Since the BDNF does not meet species viability requirements, it is critical for the BDNF to take steps to develop a multiple species conservation strategy. The limited analysis of the proposed logging on sensitive species was too superficial and inadequate to support the EA's determinations of maintaining species viability. The EA does not contain enough data or analyses to support such conclusions. In the absence of specific population/inventory data and population trend analyses of sensitive species, summary conclusions of maintaining species viability are not based on a hard look or all the relevant information and are necessarily unreasonable.

Contention 6-14. A big problem with the EA's analyses is that discussions regarding the connection between the areas designated for old-growth management and habitat needs for sensitive and other old-growth species such as the northern goshawk, fisher, black-backed woodpecker, and pine marten, i.e. how these areas contribute to population viability, is

missing. Effects of cumulative habitat fragmentation from fire, roads, logging, private land developments, livestock grazing, motorized access, etc. is missing. The issue of fragmentation should have been more thoroughly considered with respect to interior forest species.

Contention 6-15. The EA contains no real analysis of fisher habitat. The current landscape is fragmented, with older forest and riparian blocks of habitat existing as reduced patches of habitat across the landscape. The amount of older forest in the project area is below the historic range of variability. In other words, the FS is uncertain that adequate fisher habitat actually exists and provides no basis for claims that fisher viability is protected in this project area. The EA failed to disclose and analyze the uncertain and precarious population status of fishers, as described in Witmer, et al., 1998.

Contention 6-16. The project would adversely affect fisher and their habitat. Habitat elements for natal and maternal dens are found in large diameter logs or snags. These may be reduced in stands that have been intensively managed for timber. Movement, denning, resting areas, genetic diversity, and other aspects of fisher life cycles and fisher survival would be impacted by the project; the FS does not fully consider these elements of the project or adequately mitigate their impacts.

Response: Neither fisher nor their habitat was raised as an issue in comments on the Rat Creek Salvage EA. However, the EA includes an analysis of fisher and their habitat (pp. 49 to 50). The direct, indirect, and cumulative effects of the salvage project are disclosed in the EA (pp. 50 to 53).

Based upon the discussion provided in both the EA and BE, the biologist determined there would be no cumulative effects to fisher caused by implementation of this project. Fisher habitat, at the current conditions, is limited within the burn perimeter. At the landscape scale, the Forest Plan EIS (2009) demonstrates the Big Hole Landscape retains approximately 88 percent of its forested areas without recent harvest or fire disturbance (EA, p. 50). Removal of 1,652 acres of dying timber is unlikely to alter the available habitat conditions for a particular individual animal, because the species is known to be uncommon in this portion of the Montana landscape, and has a territory size ranging from 4,500 acres to near 20,000 acres. For these reasons the Rat Creek Salvage Project “may impact individual fisher, but those impacts, if they occur at all would be minimal, and would not threaten the viability of fisher in the planning area nor cause a trend toward federal listing” (EA, p. 52).

Contention 6-17. The inadequate discussion in the EA provides limited scientific basis for habitat conditions believed necessary for goshawk. The EA does not clearly disclose how goshawk habitat and goshawk viability would be affected by the project and cumulative effects.

Contention 6-18. The EA fails to include any scientifically developed conservation strategy for the goshawk such as Reynolds et al. 1992, Crocker-Bedford 1990, the Utah strategy (Graham et al., 1999), strategies for Alaska (Suring et al., 1993 and Iverson et al., 1996) and the Black Hills National Forest (USDA Forest Service, 2000b). The Northern Region’s

guidance, USDA Forest Service, 1990 could have gotten the FS moving in the right direction, however the agency ignores what that document recommends for a goshawk conservation strategy on the BDNF.

Response: The BA/BE/Wildlife Report and the EA (pp. 64 to 67) describes direct and indirect effects to northern goshawk and their habitat.

Analysis and 2009 field surveys indicate most burned areas are naturally no longer expected to function as nest area habitat for goshawks because of a loss of green tree canopy below the 45 percent cover used by goshawk. Proposed harvest units occur in these burned areas and thus are not expected to reduce suitable nest area habitat. However, if active goshawk territories are detected, no ground disturbance of nest stands (40 acres) and timing restrictions in post-fledging areas (420 acres) will be enacted.

Goshawk surveys were conducted during 3 separate field visits in June, and early July of 2009, using broadcast calls at 300 foot intervals along specified transects (based on Kennedy Stahlecker, 1993). Surveys were focused near proposed harvest units with previously documented goshawk observations. Sixty calling stations were completed using a trained crew of wildlife biologists and technicians, and findings are filed in the project record. No goshawks were detected. If active nest areas are located, conservation measures will be applied.

The GIS analysis presented in the wildlife report indicates a loss of canopy cover across the analysis area as a result the Rat Creek fire, which is likely to affect the distribution of potential nest areas and PFAs. Potential nest areas are most likely to occur in unburned forests with large trees and dense canopy cover, or within Riparian Conservation Areas, neither of which will be included within harvest units. The analysis and the project are in compliance with NEPA, NFMA, and the Forest Plan.

Contention 6-19. The EA does not consider cumulative effects on upland habitat for boreal toad. This does not make sense, since such small populations that are likely to persist are especially susceptible to fragmentation and extirpation due to isolation of smaller populations. In fact, the EA has no real analysis of cumulative impacts on boreal toads at all.

Response: Concerns about upland habitat for boreal toads were not previously raised. Boreal toad (*Bufo boreas*) was considered in the EA as part of the analysis for amphibians and aquatic habitat (pp. 67 to 79). The Rat Creek Salvage EA appropriately discusses the potential effects to western toads and their habitat commensurate with their occurrence and the potential risk to the toads (EA, pp. 75 to 78). The assessment is based on existing habitat conditions, observations of toads, location of the project, project design features, and relevant literature (for example PF, D3-28, D3-32, D3-33, and D3-103). Upland habitat and potential effects were adequately considered and disclosed commensurate with the overall risk to the western toad (EA, p. 75). Salvage harvest related changes in upland habitat for amphibians are considered largely inconsequential, when compared to existing post-fire conditions. The EA also describes the cumulative effects (p. 78), and supporting documentation is found in the aquatic BE (Brammer 2009) (pp. 3 to 10). The analysis and project are in compliance with NEPA and NFMA.

Contention 6-20. The Forest Plan is completely inadequate for maintaining viable populations of pine marten. Ruggiero, et al. (1998) and Bull and Blumton, 1999, indicate that vertical and horizontal diversity provided by snags and large down woody debris are important habitat characteristics for the pine marten. Their research shows that the logging proposed in the Rat Creek Salvage EA project reduce the availability of prey species for the marten. The EA's lack of analysis for impacts on marten viability is not scientifically defensible. Unfortunately, this EA makes no determination regarding the significance of the pine marten habitat losses associated with the fire or past or proposed logging. This does not insure viability of the species, as NFMA requires.

Response: Pine marten is not an MIS in the Revised Forest Plan. Even if this species was an MIS a detailed analysis describing the project effects specifically to marten is unnecessary because their primary habitat (mature spruce-fir forest) is not being removed through treatments. Retention of snags, old growth, riparian conservation areas, and coarse woody debris in treatment areas is adequate to provide continued use of the habitats by marten in a manner similar to current conditions.

As explained in the EA in response to comments (p. E-40), the species is not federally listed, sensitive, or a designated species of interest on the BDNF, and thus was not analyzed separately. However, effects are similar to other forest species that depend on relatively continuous stands of mature forest. Based on the summary of marten natural history described in Buskirk and Ruggiero (1994) and Buskirk (2002), marten habitat is centered in green tree mature or late-seral spruce/fir forest with substantial coarse woody debris. The project treats only a small percentage of spruce/fir forest within the burn perimeter, selects for dead and dying timber, and is located primarily in lodgepole pine habitat. Thus, the project would have minimal impacts to marten. Project design features including the retention of snags, old growth, coarse woody debris, and no harvest in riparian conservation areas will mitigate negative effects to marten that may inhabit the area. The analysis and project are in compliance with NEPA and NFMA.

Issue 7. The analysis for Canada lynx is in violation of NEPA, NFMA, and ESA.

Response: The Northern Rockies Lynx Management Direction is discussed in EA (pp. 41 to 43). Lynx has not been included in the US Fish and Wildlife Service quarterly species lists for the Beaverhead-Deerlodge NF since April 2007. The most recent list (5/04/09) maintains that status. There are no Endangered Species Act (ESA) issues for the project.

The Northern Rockies Lynx Management Direction applies to the BDNF as described in the Northern Rockies Lynx Management Record of Decision (Lynx ROD). The lynx ROD (p. 29) is included in Appendix C of the Wildlife Resource Report, and it discusses procedures for "unoccupied" habitat. The analysis completed in the wildlife resource report is consistent with this documentation. The BA/BE/Wildlife Report and the EA describes direct and indirect effects to wildlife and wildlife habitats, including lynx.

Within harvest units, some amount of travel/hiding cover will be retained through riparian conservation areas, coarse woody debris, snag retention, and unmerchantable timber left on site.

However, the area remains identified as “unoccupied” by Canada lynx, and treatment units are located primarily in lodgepole pine forest rather than spruce/fir forest, the preferred habitat for Canada lynx. There is no empirical data yet available for the Beaverhead-Deerlodge NF to delineate specific movement areas for large carnivores. The Canada lynx analysis is in compliance with NEPA, NFMA, and ESA.

Issue 8. VIOLATIONS OF NFMA AND THE CLEAN WATER ACT

Contention 8-1. The revised Forest Plan for the Beaverhead-Deerlodge National Forest does not have an MIS for streams and fish and is therefore in violation of NFMA. The failure to use westslope cutthroat as an MIS for water quality in the Forest Plan violates NFMA. Without an MIS for water quality there is no way to see if the project will compromise water quality. The mayfly as an MIS in the revised Forest Plan does not measure the impact of projects on water quality.

Response: Issues with the Beaverhead-Deerlodge Forest Plan are outside the scope of this decision. The DN (pp. 5 and 6) states the project is in compliance with the Forest Plan..

Management Indicator Species (MIS) as referenced in the Forest Plan (BDNF FP, p. 72) refer to “certain vertebrate and/or invertebrate species present in the area...selected because their populations changes are believed to indicate the effects of management activities...additional plant or animal species selected because their population changes are believed to indicate effects of management activities on other species of selected major biological communities or on water quality.” Regulations do not require an aquatic MIS, nor one specifically focused on aquatics. Rather, regulations direct selecting MIS as determined to be appropriate. No fish species were determined to be appropriate indicators of management effects, due in part to the natural variability of aquatic species and the confounding effects of unrelated factors such as drought, recreational fishing, and interspecific competition. The Forest Plan maintains aquatic habitat conditions for native species as reflected by changes in abundance of *Drunella doddsi* (mayfly) as a MIS (BDNF Forest Plan, p. 16). The Forest Plan is in compliance with NFMA.

Contention 8-2. This project is not in compliance with the Upper Big Hole TMDL because of the new road construction.

Response: The summary of effects for the water resources in the EA found that no sediment delivery is predicted for Tie Creek, Johnson Creek, Lower Trail Creek, or the North Fork Big Hole River. The EA states the proposed action would be consistent with Forest Plan water resource standards, Clean Water Act, and State Water Quality standards. The proposed action also meets the direction and load allocations listed in the Draft version of the Upper Big Hole TMDL (EA, p. 104; DN, p. 17).

Issue 8-3. The EA relies on implementation of BMPs to support its claim that the “recovering” sediment conditions in the WQLS Trail Creek will meet CWA requirements; however the lack of occurrence of the native westslope cutthroat trout (WCT) in the listed reach is troubling to say the least. BMPs simply cannot be relied upon as the Forest Plan method of maintaining viable populations when their previous use has not insured

adequate population distribution as NFMA requires. What BMP failures have been noted for past projects?

Response: Section 303(d) of the Clean Water Act requires states to list water quality limited segments of bodies of water within its jurisdiction. The EA included these segments (Table 24, p. 79). The DN states implementation of this project will be consistent with the Clean Water Act and State Water Quality standards and this project meets the direction and load allocations listed in the Draft version of the Upper Big Hole TMDL (DN, p. 20). Further degradation of WQLS stream segments due to implementation of Alternative 2 is not predicted (EA, p. 104).

Westslope cutthroat trout does not occur within the Rat Creek Wildfire area or immediately downstream. Additional information regarding the sensitive species analysis can be found in the Rat Creek Salvage Sale Biological Assessment/Biological Evaluation/Wildlife Specialist Report (Kozlowski 2009) and Rat Creek Salvage Biological Evaluation of Sensitive Species Specialist Report (Brammer 2009) located in the project file (EA, p. 43). The project is in compliance with NFMA.

Contention 8-4. The critical issue is that logging activities have no positive long-term effect on sedimentation reduction. Addition of sediment to WQLS water bodies that are already compromised in their water quality does nothing to move toward remedying the water quality violations and adverse affects on attainment of beneficial uses. Specifically, the addition of sediment to the WQLS stream from logging activities under the alternative adopted by the ROD is a violation of the Clean Water Act.

Response: The EA (p. 104) states, “No sediment delivery is predicted for Tie Creek, Johnson Creek, lower Trail Creek, or the North Fork Big Hole River.” The Water Resources section of the EA states, “Even under a worse-case scenario, the potential for any sediment delivery from a harvest unit is extremely low” (EA, p. 102). The project is in compliance with NFMA.

Contention 8-5. The EA does not disclose the statistical accuracy of the WEPP, WATSED and MK models, used in this case to estimate sediment production cause by Project activities as required by Forest Plan standards. The fact that the WEPP model has already been shown to vastly underestimate the amount of soil erosion (Maudlow-Toston Fire Salvage, Helena NF) reveals the FS’s inability to adequately predict such risks to soil and aquatic habitat integrity. The EA “reports no confidence intervals, standard deviations or standard errors in association with its conclusions” regarding model results for sediment. Along with violating the CWA and state water quality regulations in Water Quality Limited Segments, in providing no discussion of the accuracy of modeled sediment projections the Project also violates the Forest Plans.

Response: The assumptions for the Disturbed WEPP model are described in the EA (p. 81). The EA directs the reader to the project file and the soil resource report for more details regarding the modeling assumptions (p. 81). The EA (p. 92) states, “The accuracy of all Disturbed WEPP predictions is, at best, plus or minus 50 percent (Elliot et al. 2000).” The EA (p. 97) requires identification of any design or mitigation features needed to meet the desired condition. The Decision (p. 4) requires monitoring to ensure compliance with soils and water conservation practices.

Contention 8-6. The EA provides no data to substantiate its claims that streams in the project area are, in terms of sediment yields, are nearing “baseline” levels. Cobble embeddedness and channel stability data were not gathered post-fire, despite the fact that post-fire data is the only kind that would reveal the cumulative interaction between the vegetation-removing and physical soil characteristic-altering effects of the fires with the effects of past logging, road building, and erratic road maintenance.

Response: The EA (p. 100) describes the field sampling and monitoring, along with the years that it was completed for various streams within the project area. Stream substrate and cobble embeddedness were measured. The BAER report did post-fire monitoring (PF, D3-216). The EA references an analysis that shows reductions in fines in the substrate. A citation to the data used for developing the analysis is now included in the EA; Bengeyfield, 2002.

Contention 8-7. The EA fails to consider that the years since the fire have been of low rainfall, yet the EA’s analyses implicitly expect the drought to continue. This could easily turn out to not be the case. Elevated peak flows contribute to downstream flooding and increase the magnitude and extent of flood damage. Elevation of downstream flows also increases downstream channel erosion and sediment transport. Even relatively slight increases in downstream flooding greatly increase downstream erosion and sediment transport because they are exponentially related to stream flow (King, 1989).

Response: The assumptions used for the Disturbed WEPP model include information from 50 years of climatic data from Wisdom, Montana (local climate). Drought conditions are described in the EA, which is validated by current conditions and local knowledge (EA, p. 24). The hydrology analysis (and the EA, pp. 75 and 102) uses the “worst-case” scenario to predict effects under the worst possible conditions.

Contention 8-8. The EA’s watershed analysis relies, to a great degree, upon the WATSED model and on the ECA (Equivalent Clearcut Acres) modeling procedures. The WATSED model, used to estimate stream flow effects, consistently underestimates the effects of logging and roads on peak flows. The Iron Honey FEIS (U.S. Forest Service, 2001b) concedes that the FS’s own data indicate that WATSED consistently underestimates monthly peak flows by 3 to 17 percent. The FEIS fails to incorporate this FS information in its discussion of likely effects on flows within the project area and downstream. In fact, the model’s consistent underestimation of monthly peak flows is never discussed in the context of the alternatives’ effects on channel conditions and processes and aquatic habitat and fish populations.

Response: The EA’s watershed analysis does not rely on the WATSED model or ECA modeling procedures. Instead, to determine any potential changes in sediment delivery, ground disturbing activities were evaluated for soil erosion or displacement through model analysis using the WEPP model and site visits (EA, pg. 96). The hydrology analysis does address peak flows (EA, pp. 95-96).

Contention 8-9. The EA’s estimates of effects on average monthly peak flows is inadequate for determining the effects of the alternatives and cumulative effects on peak flows and

resultant impacts on channel erosion, bed load transport, sedimentation, bank erosion, fish habitat, fish survival, and downstream flooding impacts.

Response: Direct, indirect, and cumulative effects of the proposed action to water resources are discussed in the EA (pp. 102 to 104). The DN found the EA to be consistent with the Forest Plan (pp. 5 to 6). The stream channel surveys on project streams serve as long-term monitoring sites to determine whether the Forest is meeting monitoring and evaluation requirements in the Revised Beaverhead-Deerlodge Forest Plan (EA, p. 100).

Contention 8-10. The EA fails to disclose that small headwater channels are especially vulnerable to increased erosion and sediment transport to downstream habitats caused by increased peak flows (King, 1989). Increased peak flows lead to head cutting, channel erosion, expansion of cross-sectional channel area, channel widening, and elevated bank erosion. Increases in peak flow, alone, can increase erosion in smaller streams contributing to downstream sedimentation in pools and low gradient stream reaches.

Response: The EA discloses direct, indirect, and cumulative effects in the hydrology analysis (EA, pp. 101 to 104). The DN found the EA to be consistent with the Forest Plan (pp. 5 to 6).

Contention 8-11. Since modeled numbers and other statistics for peak flows are only estimates, the amount of error in such statistics should be disclosed in the FEIS to shed light on the real meaningfulness of differences in the various predicted ECA and WATSED figures used in analyses of the various alternatives.

Response: The hydrology analysis in the EA does not use ECA or WATSED models to predict effects. Instead, the analysis uses Disturbed WEPP, and the assumptions for that model are listed in the EA (p. 81) and described further in the Soil Resource Report (PF, D1-24).

Contention 8-12. The FS has also failed to monitor the long-term impacts on water quality and fish habitat from implementing the Forest Plan. As a result, the cumulative impacts of logging and road building are not sufficiently disclosed in the FEIS or anywhere else.

Response: The stream channel surveys on project streams serve as long-term monitoring sites to determine if the monitoring and evaluation requirements in the Revised Beaverhead-Deerlodge Forest Plan are being met (EA, p. 100). Forest Plan monitoring documents are referenced and included in the project file (PF, D3-212, D3-211).

Contention 8-13. The analyses do not adequately account for or mitigate watershed damage resulting from use of haul roads. This inadequacy is especially troubling regarding the 303d-listed Trail Creek, and its project area tributaries.

Response: Mitigation and design features are described in the EA (pp. 15 to 19). These design features include avoiding riparian conservation areas, installing proper culvert sizes at stream crossings, water bars, and the obliteration of temporary roads upon completion of harvest operations. Sediment from roads is considered in the analysis in the EA (p. 96). Table 31 (p. 99) displays road information by watershed. The decision notice finds that the project meets the

direction and load allocations listed in the Draft version of the Upper Big Hole TMDL (DN, p. 20; EA, p. 104).

Issue 9. The cumulative effects of past management action and results of past monitoring are not adequately considered. An EIS is required to do so.

Response: A cumulative effects analysis has been conducted for this project. Appendix B in the EA (pp. 153 to 154) lists the activities within the Rat Creek Wildfire perimeter. Table 45 (EA, p. 154) displays past harvest and fuel activities within the Rat Creek Fire perimeter from 1964 to 2003 that were considered by the interdisciplinary team during their effects analysis. This table displays the activities and when each activity occurred.

Throughout Chapter 3 of the EA, resource specialists thoroughly evaluated the most recent and available information, as well as data related to past, present, and reasonably foreseeable events that have occurred or may occur in the individual analysis areas.

Cumulative effects were analyzed and discussed by specific resource area. Examples include silviculture (EA, pp. 27 to 28), sensitive plants (EA, pp. 31 to 32), noxious weeds (EA, pp. 34 to 35), wildlife (EA, pp. 35 to 36, 40, 47, 51 to 52, 54, 57, 58, 60, 64, and 66), fish and aquatic habitat (EA, pp. 68 and 78), soils (EA, pp. 80 to 94), water resources (EA, pp. 97 to 104), fire and fuels (EA, 108 to 110), air quality (EA, pp. 113 to 114), recreation, inventoried roadless, and unroaded areas (EA, pp. 120 to 121, and 124 to 126), scenery (EA, p. 128), heritage (EA, p. 130), and financial (EA, p. 132).

40 Acre Openings

An alternative that would limit harvest units to 40 acres or less was considered, but eliminated from detailed study (EA, p. 14).

The EA (p. 66) contains a section on harvest units larger than 40 acres. The effects of these proposed salvage treatments on wildlife were considered. The wildlife biologist found that additional effects on wildlife and wildlife habitat due to unit sizes larger than 40 acres are minimal, and the openings would not affect the ability of species to occupy the area or re-establish themselves when habitat develops.

The soils analysis (EA, p. 92) evaluated units larger than 40 acres. It stated, “while more temporary road is sometimes necessary to provide harvest access and additional landings are needed, larger units generally have less impact per acre harvested. The average predicted detrimental soil disturbance for units under 40 acres is 12.57 percent and 11.80 percent for units over 40 acres after temporary road obliteration.” Appropriate consideration of openings greater than 40 acres is also found in the recreation analysis (EA, p. 122) and in the scenery analysis (EA, p. 129)

Monitoring

There is no requirement that a project disclose the results of all past monitoring in an area. The Forest Plan monitoring reports are the appropriate place to report Forest Plan and project-specific monitoring results. The EA considered past monitoring reports in the analysis. For example, in the soils section (pp. 89 to 90) the 2004 Forest Plan monitoring report was cited numerous times.

The cumulative effects analyses in chapter 3 of the EA demonstrate consideration of the past, present, and reasonably foreseeable future actions that may have a measureable and meaningful impact on the specific forest resources; they are in compliance with the requirements of NEPA. The cumulative effects did not find any significant effects that would warrant an EIS. The FONSI (p. 12) reiterated this finding. The EA, DN, and FONSI are in compliance with NEPA.

Issue 10. The habitat analyses are based on a scientifically flawed methodology.

Response: No specific reference was made in the EA to the age of the BDNF database. However, because of the Rat Creek Fire, the existing condition has changed drastically and the existing database for the Forest would not necessarily have been relevant. Field validation on current conditions was made by the silviculturist and wildlife biologist (PF H1-01). The habitat analysis for wildlife species was based on current conditions following the fire. Pre-fire and post-fire stand conditions are displayed in Appendix C of the EA (pages 155-158).

Issue 11. The Forest uses an unscientific “reburn” hypothesis to support logging.

Response: The soils effects analysis (EA, p. 89) did mention the re-burn potential for alternative 1, and how it could affect soil heating, if the area did re-burn. However, this was discussed only as a possible indirect effect, not in support of any alternative. The purpose and need for this project does not include any objective to reduce fuels, or any discussion of a “re-burn” theory. The purpose and need for the Rat Creek Project (EA, p. 3) is to recover and utilize timber from trees that are dead or dying as a result of the Rat Creek Wildfire or forest insects and disease, and reforest the harvested units with healthy trees appropriate for the site.

Issue 12. The Forest has failed to show the need for an emergency situation determination.

Response: The situation meets the definition of an emergency situation as defined at 36 CFR 215.2. The emergency situation is triggered by the rapid deterioration and decay of trees proposed for salvage harvest. Immediate implementation of salvage activities is necessary in order to avoid losing the economic value of these trees (PF J1-01).

The purpose of the Rat Creek Salvage Project is to recover and utilize timber from trees that are dead or dying as a result of the Rat Creek Fire or forest insects and disease. The trees would supply wood to the forest products industry. In evaluating whether an emergency situation exists with this project, the Chief of the Forest Service, in her letter dated July 1, 2009 (PF J1-04) stated, “In evaluating whether an emergency situation exists with this project, I also took note of the importance this project has to the local economy of southwest Montana. I understand the wood products yielded by this project will be a critical contributor to helping keep local mills.”

A letter dated April 17, 2009, was also sent to inform the public of the intent to request an emergency situation determination (PF B3-02). Title 36 CFR 215.10(d) states the responsible official shall notify the public in the legal notice of the decision when the Forest Service makes a determination that all or part of a project is in an emergency situation. In compliance with the regulations, a legal notice was published in the Montana Standard on July 22, 2009 (PF F1-05) concerning the Decision, which included information on the emergency situation.

A hard look was taken at the economics of this project and a determination for emergency situation was made not only for the economic value of the projects but also for the economic value of the wood products to the community.

RECOMMENDATION

I have reviewed the record for each of the contentions addressed above and have found the analysis and decision adequately addresses the issues raised by the appellants. I recommend the Forest Supervisor's decision be affirmed. I also recommend the appellants' requested relief be denied.

/s/ Julie K. King
JULIE K. KING
Appeal Reviewing Officer

cc: Dave Myers
Peri R Suenram
Ray G Smith



File Code: 1570 (215)
#09-01-00-0063
Date: October 22, 2009

Michael Garrity
Executive Director
Alliance for the Wild Rockies
P.O. Box 505
Helena, MT 59624

Dear Mr. Garrity:

This is my decision on disposition of the appeal you filed, on behalf of the Alliance for the Wild Rockies and the Native Ecosystems Council regarding the Rat Creek Salvage Decision Notice (DN) on the Beaverhead-Deerlodge National Forest (Wisdom Ranger District).

My review of your appeal was conducted pursuant to, and in accordance with, 36 CFR 215.18 to ensure the analysis and the decision are in compliance with applicable laws, regulations, policy, and orders. I have reviewed the appeal record, including your arguments, the information referenced in the Forest Supervisor's September 22, 2009 transmittal letter, and the Appeal Reviewing Officer's analysis and recommendation (copy enclosed). The transmittal letter provides the specific page references to discussions in the Environmental Assessment, DN, and project file, which bear upon your objections. I specifically incorporate in this decision the appeal record, the references and citations contained in the transmittal letter, and the Appeal Reviewing Officer's analysis and recommendation.

The Appeal Reviewing Officer has considered your arguments, the appeal record, and the transmittal letter and recommends the Acting Forest Supervisor's decision be affirmed and your requested relief be denied.

Based upon a review of the references and citations provided by the Forest Supervisor, I find the objections were adequately considered in the DN. I agree with the Appeal Reviewing Officer's analysis and conclusions in regard to your appeal objections. I find the Acting Forest Supervisor made a reasoned decision and has complied with all laws, regulations, and policy.

After careful consideration of the above factors, I affirm the Acting Forest Supervisor's decision to implement the Rat Creek Salvage project. Your requested relief is denied.

My decision constitutes the final administrative determination of the Department of Agriculture [36 CFR 215.18(c)].

Sincerely,

/s/ *Ranotta K. McNair*
RANOTTA K. MCNAIR
Acting Deputy Regional Forester



cc: Dave Myers
Earl Stewart
Peri R Suenram
Julie K King
Ray G Smith